M/035/002
M/035/015 *

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**Paula H. Doughty**
Director, Environmental Affairs



Kennecott

August 5, 2005

**CERTIFIED MAIL**
Ms. Susan White
Minerals Reclamation Program
Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Salt Lake City, Utah

Subject: Notice of Current and Upcoming Projects at Kennecott Utah Copper Corporation

Dear Ms. White:

Attached is a description of current and upcoming projects at Kennecott Utah Copper Corporation (KUCC). Projects involving planned expansions are taking place at the Mine and Tailings, while demolition activities are scheduled for the historic Bonneville Crushing and Grinding Plant and the Precipitation Plant. The expansion projects at the mine and tailings are a continuation of existing operations and are within the permitted disturbed acreage. The demolition projects are part of KUCC's closure commitment and continued reclamation and remediation activities.

Please contact me at 569-7120 or Vicky Peacey (569-7118) if you have any questions or comments.

Sincerely,

Paula H. Doughty
Director, Environmental Affairs

Attachments
Cc: Dan Hall (DWQ)
Ed Hickey (DWQ)

Bcc: T. Himebaugh
D. Stauffer
D. Baize
T. Nannini
K. Payne
D. Powers
B. O'Neill
R. Newnam
File: OPS-RR-MF-Corres.DOGM

# CONTINUATION OF MINING ACTIVITIES

## Mine Expansion

In February 2005, Kennecott Utah Copper Corporation received approval to expand open pit operations through the mining of additional sectors. This is a continuation of current open pit operations. The expansion, internally called Giant Leap East 1, combined with some process improvements (Pebble Crushing) will add about 5 years of open pit mine life. The current projected closure date is now approximately 2019.

Ore

The Bingham Canyon Pit supplies nearly 60 million tons of ore per year to the Copperton Concentrator through 2016. Ore requirements will increase starting in 2006 with the start-up of Pebble Crushing. After 2016 ore production is from the lower mine area, which is typically characterized by lower throughput rates and thus rates progressively decline. The ultimate size of the open pit at the end of currently projected mine life (~2019) will be approximately 2,500 acres, well within the 3,100 acre area identified in the 1978 Mining and Reclamation Contract.

Waste Rock

Starting in 2005 through life of mine, close to 900 million tons of additional waste rock will be generated. Waste rock extraction averages 100 million tons per year through 2009. Starting in 2010 waste rock production progressively declines as the required ore exposure is achieved.

This material will be placed in Bingham Canyon or in lifts on top of existing waste rock disposal areas along the East Side dumps. All waste rock will remain within the boundaries of DOGM permit number M/035/002 and will not exceed the 8,000 acre area allocated for waste rock disposal in the 1978 Mining and Reclamation Contract.

All waste rock disposal between 2005 and LOM will take place within the 3,200 acre area currently designated for contouring only. The mining of selected areas from the expansion waste rock may provide opportunities to increase the amount of vegetated waste rock surfaces.

## North Tailings Embankment: Drainage Blanket

The North Impoundment has been designed and is being constructed using modern state-of-the-art design methods described as a modified centerline embankment. The North Embankment is constructed using compacted cyclone sand tailings. A water under-drain system beneath the North Embankment is critical to the proper operation of the North Impoundment.

The North Impoundment provides adequate storage capacity for continued copper mining activities in addition to providing envelopment and buttressing to the seismically vulnerable portions of the South Impoundment. As discussed in the Notice of Intent for the North Tailings Impoundment (M/035/015) there are insufficient tailings available on an annual basis to construct the full base width of the North Embankment. Therefore, is being constructed in two phases.

Phase 1

Phase 1 construction includes Zone A of the North Embankment. To facilitate dewatering of the existing Zone A embankment area. The Zone A embankment was constructed on a 3ft thick composite slag aggregate drainage blanket. Phase 1 is nearing completion and the Zone A embankment allows storage of tailings through approximately 2013.

Phase 2

Phase 2 construction includes Zones B&C. The Phase 2 under-drain system was originally designed similar to Zone A, however due to a potential deficit in the available slag, an optimized under-drain system was required. A cross section of the North Embankment is shown in Figure 1. Instead of a drainage blanket, it was determined that the Phase 2 under-drain system could be constructed using 50-foot wide finger drains placed 150 feet on center-to-center spacing across Zones B&C. A total of 242 drain fingers will be constructed in the Phase 2 expansion area and all drain fingers will be tied into the existing Phase I drain blanket.

The optimized Phase 2 finger drain system meets the original geotechnical design criteria in the original permit application (1996). The revised under-drain design was reviewed and approved by the Utah State Engineer's Office in March 2004. Construction of Phase II remains within the boundaries of DOGM permit number M/035/015 and will not increase the permitted disturbed area allocated for the North Tailings Impoundment (3,334 acres).

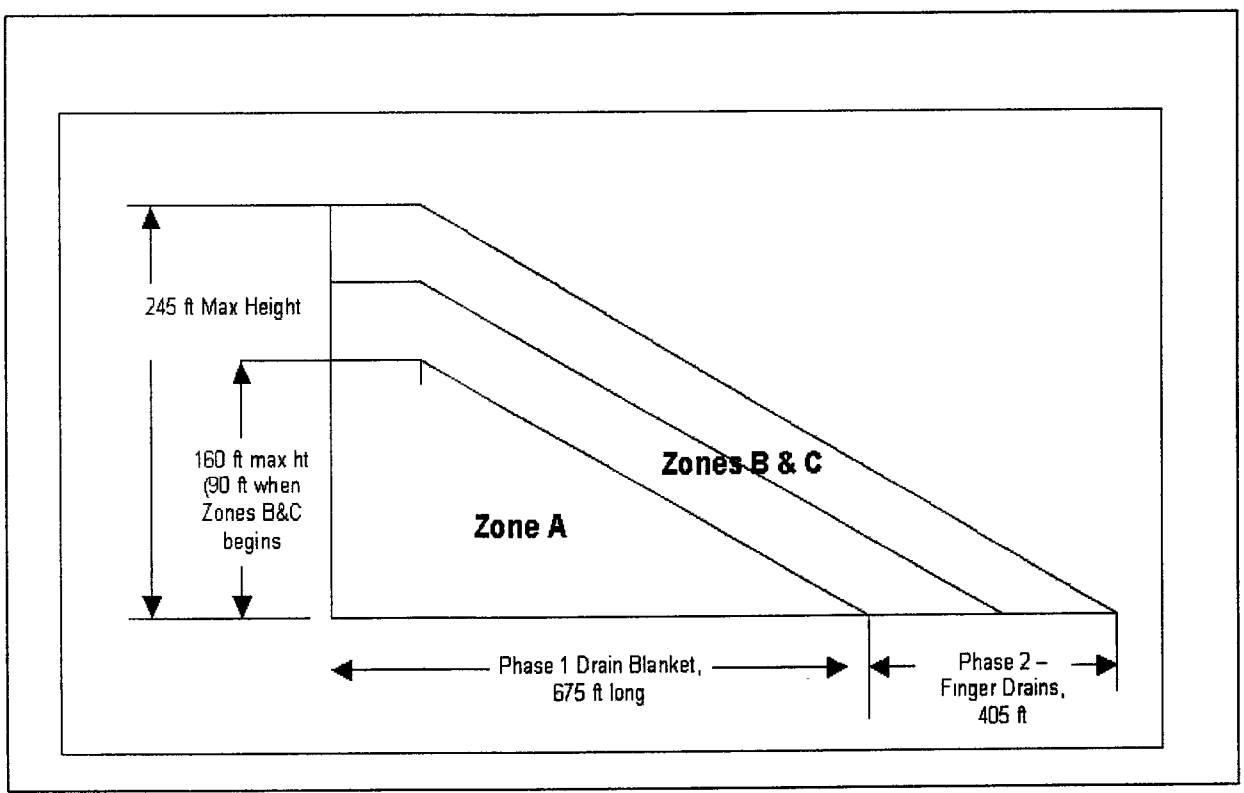


Figure 1: North Tailings Embankment Cross Section and Construction Zones.

# PLANNED DEMOLITION ACTIVITIES

## General

In 2005 two Kennecott facilities that are no longer in use have been identified for demolition. These facilities include the Precipitation Plant and the Bonneville crushing and grinding plant.

The general scope of work for the two areas is as follows:

- Survey, quantify, remove and dispose of the hazardous materials
- Decommission all utilities
- Remove, characterize, segregate and dispose of all Galbestos roofing and siding
- Mechanically demolish the identified structures to top of concrete
- Characterize, segregate and dispose of the construction debris
- Decontaminate and recover all scrap materials and equipment
- Backfill all basements and pits with select fill
- Sample and characterize the soils
- Over excavate contaminated soils to 18" depth and cap with select fill (in those areas that will not be re-contaminated by on-going operations)
- Seed capped areas

Environmental, Health and Safety

During demolition of structures, materials will be removed in a safe and environmentally sound manner. Materials will be inspected, sampled and identified prior to demolition activities to estimate quantity and type of hazardous material requiring removal. Waste materials will be segregated, packaged, labeled, stored and properly disposed of. Prior to demolition activities structures will be prepared for safe demolition. Scrap metals will be segregated and sectioned into manageable pieces, in preparation for transport. Where possible, recycling will occur. Oversight of the demolition and soils characterization and potential removal is being coordinated through the Utah Division of Air Quality and the Environmental Protection Agency (EPA) Region VIII/Utah Division of Environmental Response and Remediation (UDERR).

## Precipitation Plant

There are a number of support facilities that are located in the vicinity of the mine, including the Precipitation Plant. In 1965, Kennecott started expansion of its waste rock leaching operations and built a Precipitation Plant using scrap iron cone precipitation for copper recovery. The Precipitation Plant is located in Bingham Canyon just down gradient of the ultimate toe of the Lower Canyon waste rock dump. The cone precipitators were designed as counter current chemical reactors where pregnant leach solution was injected into each cone and flow upwards through the iron. At its peak, this plant treated over 50,000 gpm of copper bearing leach solution.

In October 2000, Kennecott's waste rock leaching operations ceased. Although some portions of the Precipitation Plant are currently used to treat water collected from the waste rock, a number of structures are no longer in use and have been identified for demolition.

Structures at the Precipitation Plant have been identified for demolition and are listed as follows:

- Wood Stave Thickener & Associated Feed Launders (South of the Scavenger Cells)
- Tin Feed Conveyor, Gantry Crane & Associated Equipment
- North Cone Structure & Associated Equipment (To Top of Concrete)
- South Cone Structure & Associated Equipment (To Top of Concrete)
- Compressor Building & Concentrate Storage Bunker (To Top of Concrete)

In some cases the concrete will be left in place for continued staging of equipment or as work areas for Kennecott operations.

## Bonneville Crusher

The Bonneville crushing and grinding facility is located at the point of the mountain, to the south of HWY 201 and overlooking the town of Magna. The Bonneville crushing and grinding facility was constructed in 1966. Its primary function was crushing and sizing of ore in preparation for the North Concentrator beneficiation operation. Train loads from the Bingham Canyon mine were unloaded, crushed and sized in a primary and fine crushing circuit and a final grind plant.

By June 2001 operation of the Bonneville facility ceased operation.

**Bonneville Crushing & Grinding Facility Structures:**

The following structures at the Bonneville crushing and grinding facility have been identified for demolition and are listed as follows:

- Symons Building, Ancillary Equipment, Associated Conveyors & Drive Houses
- Dumper Building, Ancillary Equipment, Associated Conveyors & Drive Houses
- Fine Ore Building, Ancillary Equipment, Associated Conveyors & Drive Houses
- Grind Building, Ancillary Equipment, Associated Conveyors & Drive Houses
- Ancillary Structures which include; Change Rooms, Administration Building, Electric Shop, Motor Shed, Weld Shop, Warehouse & ERT Vehicle Garage
- Note: All structures to be demolished to top of concrete